

IN THE CLAIMS:

Please amend claims as follows.

1. (currently amended) A method of producing a perovskite complex oxide wherein,

at the time of producing a perovskite (RTO_3) complex oxide phase by heat treating a precursor substance that is a powdery starting material containing at least one rare earth element R and at least one transition metal element T, there is used as the precursor substance an amorphous substance containing the R and T components at a content ratio required for producing the complex oxide, and the amorphous substance is a precipitated substance obtained by precipitation from an aqueous solution containing R ions and T ions using a precipitant and a reducing agent under a pH of 6 to 12.

2. (original) A method of producing a perovskite complex oxide according to claim 1, wherein a perovskite complex oxide phase is generated by heat-treating the precursor substance at a temperature of 400 °C – 700 °C.

3-4. canceled.

5. (previously presented) A method of producing a perovskite complex oxide according to claim 1, wherein the precipitant is an alkaline carbonate or carbonate containing ammonium ions.

6. (previously presented) A method of producing a perovskite complex oxide according to claim 1, wherein the precipitant is a combination of ammonia and carbon dioxide.

7. (previously presented) A method of producing a perovskite complex oxide according to claim 1, wherein the reducing agent is a hydrogen-generating compound.

8. (previously presented) A method of producing a perovskite complex oxide according to claim 1, wherein the perovskite complex oxide has a BET specific surface area exceeding 10 m²/g.

9-10. canceled

11. (new) The method of claim 1, wherein a total ion concentration of R and T in the aqueous solution used in the precipitation step is within the range of 0.01 – 0.60 mole/L.

12. (new) The method of claim 1, further comprising the step of precipitating the amorphous substance from the aqueous solution containing the R and T ions using the precipitant and the reducing agent under a pH of 6 to 12.

13. (new) The method of claim 12, wherein a total ion concentration of R and T in the aqueous solution used in the precipitation step is within the range of 0.01 – 0.60 mole/L.